

AS/A2 CHEMISTRY

Entry requirements:

Dual Science: BB or above
Chemistry: B or above

Examination board:

AQA

Teachers:

Mrs V Bates Mr A Conheeneey Mr B Fisher
Mrs E Wright Mr N Barnet Mr P Carter

Timetable organisation

5 Lessons / Week
2 Lessons taught by teacher A
3 Lessons taught by teacher B
(This includes the practical lesson)

Main Syllabus areas

AS Unit 1

Particles, composition of the nucleus, isotopes and use of mass spectrometer. Calculating the amount of substance. Ionic, covalent and metallic bonding and intermolecular forces. The construction of the periodic table. Organic Chemistry. Alkanes from crude oil.

AS Unit 2

Collision theory and effect. Definitions of oxidation and reduction. Redox properties of halogens and halide ions. The extraction of metals. Haloalkanes and alkenes.

A2 Unit 4

Acids and bases. Nomenclature and isomerism in organic chemistry. Compounds containing the carbonyl group. Amines; bases properties and nucleophilic properties.

A2 Unit 5

Thermodynamics. Periodicity; reactions of Period 3 elements. Redox equilibria. General properties of transitional metals. Polymers. Organic synthesis and analysis.

Method of assessment

AS Unit 1: 1hr 15 mins.

Weighting: 33% of total AS level marks, 16% of total A level marks.

AS Unit 2 Written Paper: 1 hour 45mins

Weighting: 46% of total AS Level marks
23% of total A Level marks

AS Unit 3: Internal Assessment.

Weighting: 20% of total AS level marks, 10% of total A level marks.

A2 Unit 4 Written Paper: 1hr 45 mins.

Weighting 20% of total A level marks.

A2 Unit 5 Written Paper: 1 hr 45mins,
Weighting 20% of total A Level marks.

A2 Unit 6 Internal Assessment.

Weighting: 10% of total A level marks.

Qualities required

High levels of interest, commitment & organisation.
Good mathematical skills.
Enthusiasm for practicals.
Enjoyment of science.

Links with other subjects

Chemistry links well with Physics and Biology, and also Mathematics and Geography to a lesser extent.

Career prospects

Very good observation, logical analysis, numeracy and practical skills are developed with the ability to write clear reports, all of which are desirable to future employers and institutions. Possible careers include Chemical Research, Chemical Engineering, Medicine, Veterinary Science, Dentistry, Teaching, Physiotherapy, Pharmacology, Physiology, Forensics, Biochemistry, Biotechnology etc.

Extension and enrichment opportunities

Y12 Visits
Spectroscopy at a local University
Revision Lectures
Various Lectures
Opportunity to attend national R.S.C. competition.
Y13 Visits
Forensic workshop at a local University
Revision Lectures
Various Lectures